

METHOD OF DETECTING FLICKER, AND VIDEO CAMERA
USING THE METHOD

Abstract of the Disclosure

Lighting flicker in the output of a video imaging device is detected. The video imaging device has a main picture area divided into pixels for producing successive images at a frame rate. A series of signals are produced from at least one additional picture area adjacent the main picture area, with the additional picture area having a size substantially larger than a pixel. Each of the signals is a function of light incident on the additional picture area in a time period substantially shorter than that of the frame rate. A predetermined number of the signals are accumulated to form a series of compound samples, and the compound samples are filtered to detect components indicating the lighting flicker. The filtering is performed using a bandpass filter tuned to the nominal flicker frequency. The compound samples are formed at a sample rate which is a multiple of the nominal flicker frequency, and the filtering is performed by taking the fundamental output component of a radix-N butterfly.